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Profile and critical thinking levels of nursing students in a health school

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Abstract

Aim: To determine profile and critical thinking levels of the nursing students. The descriptive research data were collected by using The California Critical Thinking Disposition Inventory (CCTDI). 136 nursing students who volunteered to participate in the research were included in the study. Figures, percentage,, average and correlation were used in evaluation of the data.

The average age of students who accepted to take place in the research was $20,80 \pm 1,470$, and 83,8% of them were female students. It was found that the families of 39% of the students were protective and families of 84,6% of the students had average economical level. As for the critical thinking levels, it was found that average CCTDI points were $217,84 \pm 20,236$. The students' critical thinking level scores were found low. For this reason; in order to improve critical thinking ability, strategical planning in nursing education would be beneficial.

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Keywords: nursing student, critical thinking, nursing education, education.

1. Introduction

Critical thinking is one of the ways of thinking, ,that serves in accessing information, creating information and problem solving, which are the most important function and aspect of thinking (Semerci 2000). According to Yıldırım Ozeruz (2011), critical thinking is "the ability and skill of an individual to search for information to improve his thinking, being aware of his thinking, to acquire, evaluate, analyze and synthesize such information, to make decisions and use such information by adding creativity and taking risks."

Nowadays, all of the members of the profession should adapt easily to the developments and innovation, eliminate information wisely and have modern and professional quality. In order to be attuned to the innovations of the age, these qualities can be gained by nursing students through a modern education which aims at making the students internalize the basic notions and fitting them with qualities that enable the students to solve the problems

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using critical thinking (Çıkrıkçı 1992, Kaya 1997, Öztunç 1999). Universities, which are defined as the environment for the universally thinking people, are of crucial importance in realizing this (Kaya 1997, Kökdemir 2003).

Since the changes in the health care system are rapid and dynamic, the nurses should use critical thinking in addition to the traditional nursing approaches in providing optimal patient care and clinical decision making.

As it is the same in all professional occupations, the importance of critical thinking has been emphasized by national and international nursing institutions and critical thinking is accepted as one of the basic tenets of nursing practices (Angel, Duffey and Belyea 2000, Facione, Facione and Sanchez 1994, Martin 2002). Nurses' developing their critical thinking skills is of great importance for nursing to become a discipline that believes in science, investigates and implements the scientific facts and realize its applications based on evidence (Taşocak 1997, Dil Coşkun 2001; Özer 2002; Karagenç 2003).

Adams argues that the ability of critical thinking increases as the experience at work increase, and the critical thinking skills can be improved during nursing education (Adams 1999).

Aim of the study

The aim of the study is to determine the critical thinking levels of the nursing students in the nursing department of a medical school.

Method

A written consent was taken from the school administration. 136 nursing students attending a medical school in the academic year of 2008-2009 and who were willing to participate in the study were taken as sample for the study. The data for this descriptive study were collected using the California Critical Thinking Disposition Inventory (CCTDI). CCTDI was evaluated over 306 points by adding the total points given by the students to each item depending on their level of agreement with such item. As a result of this calculation, it was accepted that students below 240 points had low, those between 240 and 300 points had average and over 300 points had high levels of critical thinking. In grading the scale, the negative items (5, 6, 9, 11, 15, 18, 19, 20, 21, 22, 23, 25, 27, 28, 33, 36, 41, 43, 45, 47, 49, 50) were reversed. In this study the cronbach alpha value of the problem solving section of the CCTDI scale was found to be 90, value for critical thinking section was found to be 82 and the overall cronbach alpha value of the scale was found to be 76. In evaluating the data; figures, percentage, average and correlation were used.

Findings

The average age of the students accepted participating in the study ($n=136$) was $20,80 \pm 1,470$, 83,8% of them were female, 45,6% of them were regular high school graduates, and 93,3% of them had jobs. 70,6% of the students preferred the nursing department for job guarantee. 41,2% of the students expressed that they were glad of being a student in this school, and 53,7% considered the education in the school of good quality. 61% percent of the students expressed that they had partial previous knowledge on the department they were attending. 46% of the students were staying in the dormitories. %49 of the students expressed that they can participate in the scientific activities (Seminars, panel discussions, etc.) and 56% of them to social activities (movies, theatres, etc.) to some extent (Table 1).

Table 1: Distribution of the Definitive Properties of the Students. (N=136)

Definitive Properties		Number	Percentage
Grade	Freshmen	53	39,0
	Sophomores	36	26,5
	Juniors	16	11,8
	Seniors	31	22,8
Gender	Male	22	16,2
	Female	114	83,8
The reason for preferring the department they attend	Coincidence	15	11,0
	Job Guarantee	96	70,6
	Interest in the profession	19	14,0
	The positive image of inst,	1	,7
	Admiring Education Quality	1	,7
	Other	4	2,9
Can you participate in the social activities (movies, theatres) you wish?	Yes	40	29,4
	No	20	14,7
	To some extent	76	55,9
Can you participate in the scientific activities (seminars, panel discussions) you wish?	Yes	40	29,4
	No	29	21,3
	To some extent	67	49,3
What are your opinions on the quality of the education in your school?	Very qualified	5	3,7
	Qualified	73	53,7
	Qualified to some extent	51	37,5
	Not qualified	7	5,1

When the features for the family are investigated, it was seen that 39% of the families were protective, and 84,6% of them were of middle socioeconomic level (Table 2).

While only 19% of the students expressed that they were living in major cities before their university education, 42% of them were living in towns, and 44% of them expressed that their families lived in the Aegean Region. 39% of the students pointed out that the general structure of their families was protective and 84,5% of them had middle socioeconomic level. 60% of the students indicated that the education level of their parents were primary school, 94% of them declared that their mothers were housewives. 25,7% of them expressed that their fathers were retired, 26,5% were tradesmen and 20,6% of them were farmers. (Table 2).

Table 2. Properties Defining the Family Statuses of the Students

Definitive Properties		Number	Percentage
The place you lived before your university education	Metropolitan City	26	19,1
	City	33	24,3
	Town	56	41,2
	Village	21	15,4
General Structure of your family*	Authoritative	15	11,0
	Sollicitous	14	10,3
	Democratic	50	36,8
	Protective	53	39,0
	Unconcerned	4	2,9
Socioeconomic Level*	Other	-	-
	Low	17	12,5
	Middle	115	84,6
Mother's level of education	High	4	2,9
	Not literate	16	11,8
	Literate	9	6,6
	Primary School	83	61,0
	High School	26	19,1
	Higher Education	2	1,5
Father's level of education	Not literate	3	2,2
	Literate	7	5,1
	Primary School	82	60,3
	High School	30	22,1
	Higher Education	14	10,3
Mother's occupation	Housewife	128	94,1
	Retired	5	3,7
	Teacher	3	2,2
Father's occupation	Tradesmen	36	26,5
	Farmer	28	20,6
	Private Sector	3	2,2
	Retired	35	25,7
	Civil Servant	19	14,0
	Worker	15	11,0

When the critical thinking levels of the students were considered, the CCTDI point averages were found to be $217,84 \pm 20,236$. As a result of the grading, students with points below 240 were considered to have low levels of critical thinking skills.(Table 3)

Table 3. The Critical Thinking Point Average for Student Nurses:

	N	Mean	Sd.	Minimum	Maximum
criticaltotalpoint	136	217,84	20,236	169	279

When the critical thinking levels of the student nurses were examined, it was seen that 87,5% of the students (N=119) had low critical thinking levels.(Table3)

Results and Suggestions

It was found that 39% of the families were protective, and 84,6% of them were of middle socioeconomic level. There was not statically significant difference between critical thinking and socio-demographic features of the students (Students' families, parents' education etc.). The critical thinking levels of the students were found to be low. These research results were similar to that of Yıldırım (2010) and Öztürk (2008).

It is known that critical thinking has an important place in patient care. Therefore it would be appropriate to make new strategic planning in education in order to improve critical thinking for nursing students.

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